## NOAA Licensee (FOREIGN AGREEMENT) Data Protection Template

## A. End-to-end process (high level)

- 1. Provide a high level description of the overall *data protection strategy* and how operational control would reside within the United States at all times, including the ability to override all commands issued by any operations centers or stations.
- 2. Provide a *flow diagram*, showing all external interfaces, that highlights the entire *data protection process*, from satellite tasking orders to delivery of imagery and finished products to the Foreign Affiliate (herein, "FA").
- 3. Provide a *high level description* of the *end-to-end data protection process between the spacecraft and the* FA ground station and between the US control center and the FA's ground station. This description should delineate between protection methods implemented on the spacecraft (e.g., data encryption) and ground based protection methods (e.g., ground receiving station physical security). These protection methods must clearly implement the license conditions regulating command authority, tasking, imagery resolution and delivery time, country/regional access to imagery, etc.) The high level description should address, at a minimum, maintenance of operational control, data collection restrictions, access, secondary/tertiary dissemination, and methods to counter any unauthorized efforts to exploit the satellite and data.
- 4. If data collects from FA ground stations are not replicated and archived within the United States provide a high-level overview of archive protection and retention process. What contractual and post contractual obligations does the FA have to insure compliance with the "purge notification" clause? "Before purging any licensed data in its possession, the licensee shall offer such data to the National Satellite Land Remote Sensing Data Archive at the cost of reproduction and transmission. The Department of the Interior shall make these data available immediately to the public at the cost of fulfilling user requests."

## **B.** Program Space Segment (detailed information)

Provide a brief description of the space segment to include:

- 1. General space/ground architecture highlighting the FA ground station and its functionalities (description with diagram).
- 2. Overview of the end-to-end system communications architecture highlighting the FA ground station and its functionalities (description with diagram)

## C. Program Ground Segment (detailed information)

Provide a description of the ground segment to include:

- 1. Overview of ground segment communications architecture (description with a diagram). This architecture includes concept of operations between satellite control center and remote ground station, including capabilities of remote station regarding TT&C (Tracking, Telemetry, & Command), or data tasking authority, and/or decryption, as well as terrestrial communication links and associated data protection methods.
- 2. Owners and operators of FA ground station facilities must be identified in detail, as well as any co-located data reception facilities at the ground station.
- 3. Personnel security (clearances, background checks, badging, access control), physical security (fences, gates, locks, guards, etc) within ground receiving stations and ground processing facilities. Treat each separately.
- 4. Protection (physical, electronic, storage, encryption, etc) afforded to processed or unprocessed imagery and associated metadata within ground receiving stations and ground processing facilities. If applicable, indicate level of protection afforded to TT&C and tasking lists within each facility possessing these authorities. Processing Center(s) imagery processing and distribution flow including:
  - a. Data relay methods and protection mechanisms between ground receiving stations and ground processing centers {by RF (Radio Frequency) and/or physical transport}. Highlight whether protection is accomplished by encryption or physical security (or both).
  - b. Protection mechanisms for end product during relay or delivery to licensed distributors, resellers, and value-added providers, as well direct sales to end-users. This requirement (examples might include physical security, separate delivery of encrypted files and the keys, etc.) is placed on both the licensee and their licensed distributors to inhibit diversion to proscribed entities.
- 5. Methodology foreign entity / remote ground station will use to ensure data dissemination complies with the US Department of the Treasury: Office of Foreign Assets Control (OFAC), Department of Commerce, and/or Department of State "denied parties" restrictions.
- 6. Methodology and/or protection mechanisms to ensure FA cooperation to address limitations on the collection and/or dissemination of data and imagery imposed by the Secretary of Commerce to protect the national security concerns of the United States.
- 7. Provide the physical address and GPS coordinates of the FA ground station and local Point of Contact information for coordination of NOAA site inspections.